

Instruction Manual

New Button Cell 30H/40H NiMH 1.2V Rechargeable Coin Battery with Solder Feet

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1. PRODUCT OVERVIEW

This manual provides essential information for the safe and effective use of the Generic 30H/40H NiMH 1.2V Rechargeable Coin Battery with Solder Feet. This compact, rechargeable battery is designed for applications requiring a reliable, low-profile power source with integrated solder tabs for easy installation into electronic circuits.



Figure 1: Generic 30H/40H NiMH 1.2V Rechargeable Coin Battery with Solder Feet. This image shows the top view of the green coin cell battery with two metallic solder tabs extending from its side, designed for direct soldering onto a circuit board.

2. IMPORTANT SAFETY INFORMATION

Read all safety instructions before using this product. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- **Do not short circuit:** Avoid direct contact between the positive and negative terminals. Short-circuiting can lead to overheating, fire, or explosion.
- **Do not incinerate:** Never dispose of batteries in fire. They may explode.
- **Do not disassemble:** Do not attempt to open, modify, or disassemble the battery. Internal components may be harmful.
- **Keep away from children:** Store batteries out of reach of children and pets. Ingestion can be dangerous.
- **Use appropriate charger:** Only use chargers specifically designed for NiMH rechargeable batteries. Using an incorrect charger can damage the battery or cause safety hazards.
- **Observe polarity:** Always ensure correct polarity (+ and -) when installing or connecting the battery.
- **Avoid extreme temperatures:** Do not expose the battery to extreme heat or cold. Store in a cool, dry place.
- **Handle with care:** The solder tabs are delicate. Handle carefully to prevent bending or breaking.

3. PRODUCT FEATURES

The Generic 30H/40H NiMH Coin Battery offers the following key features:

- **Rechargeable NiMH Chemistry:** Provides reliable power and can be recharged multiple times, reducing waste.
- **Compact Coin Cell Design:** Small form factor suitable for devices with limited space.
- **Integrated Solder Feet:** Designed for direct and secure soldering onto printed circuit boards (PCBs).
- **Standard Voltage:** 1.2V nominal voltage, compatible with many low-power electronic applications.
- **Capacity:** 30mAh capacity, suitable for maintaining memory, real-time clocks (RTCs), or providing backup power.

4. SETUP AND INSTALLATION

This battery is intended for integration into electronic devices via soldering. Professional installation is recommended if you are not experienced with soldering electronic components.

1. **Prepare the Work Area:** Ensure a clean, well-ventilated workspace. Gather necessary tools: soldering iron, solder, flux (optional), desoldering braid/pump (for replacement), safety glasses.
2. **Identify Polarity:** Carefully observe the positive (+) and negative (-) markings on the battery and the corresponding pads on your circuit board. Incorrect polarity will damage the battery and/or the device.
3. **Position the Battery:** Align the battery's solder feet with the designated pads on the PCB. Ensure a stable fit before soldering.
4. **Solder Connections:** Apply a small amount of solder to each tab, ensuring a strong, clean connection. Use minimal heat and soldering time to avoid damaging the battery.
5. **Inspect Connections:** After soldering, visually inspect all connections for cold joints, solder bridges, or poor adhesion.

Note: If replacing an existing battery, carefully desolder the old battery first, ensuring no damage to the PCB traces.

5. OPERATING INSTRUCTIONS (CHARGING)

This NiMH battery is designed to be recharged within the device it is installed in, typically through a dedicated charging circuit. If charging externally, adhere to the following guidelines:

- **Charger Compatibility:** Use only a charger specifically designed for NiMH batteries with a charging current appropriate for a 30mAh capacity. Overcharging can damage the battery.
- **Charging Rate:** For optimal battery life, a slow charge (e.g., C/10, which is 3mA for a 30mAh battery) is recommended for 14-16 hours. Faster charging methods (e.g., C/2 or C/1) may be possible with advanced chargers that detect full charge, but should be done with caution.
- **Temperature:** Charge batteries at room temperature (10°C to 45°C / 50°F to 113°F) for best results and safety.
- **Initial Charge:** New batteries may not be fully charged. It is recommended to perform a full charge cycle before first use.

The battery will provide power to the connected circuit as long as its charge level is sufficient. Performance may degrade as the charge depletes.

6. MAINTENANCE

Proper maintenance can extend the lifespan of your NiMH battery:

- **Storage:** If storing the battery for an extended period, store it in a cool, dry place, ideally at a partial charge (around 50%). Avoid storing fully discharged or fully charged.
- **Cleaning:** Keep the battery and its contacts clean and free of dust or corrosion. Use a dry, soft cloth.

Do not use liquid cleaners.

- **Avoid Deep Discharge:** While NiMH batteries are less prone to memory effect than older NiCd, repeated deep discharges can still reduce overall capacity over time.
- **Regular Use:** For optimal performance, use and recharge the battery regularly.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Battery not holding charge / Short runtime	<ul style="list-style-type: none">• Improper charging• Battery reached end of life• High self-discharge rate	<ul style="list-style-type: none">• Ensure correct charger and charging method are used.• Replace the battery if it's old or heavily used.• Ensure proper storage conditions (cool, dry).
Device not powering on after battery installation	<ul style="list-style-type: none">• Incorrect polarity• Poor solder connection• Battery not charged• Device fault	<ul style="list-style-type: none">• Verify battery polarity.• Inspect solder joints and re-solder if necessary.• Charge the battery fully.• Consult the device's manual or a qualified technician.
Battery overheating during charge/discharge	<ul style="list-style-type: none">• Overcharging• Short circuit• Internal battery fault	<ul style="list-style-type: none">• Immediately disconnect from charger.• Check for short circuits in the circuit.• Discontinue use and safely dispose of the battery.

8. PRODUCT SPECIFICATIONS

Model: 30H/40H

Battery Type: NiMH (Nickel-Metal Hydride)

Voltage: 1.2V (Nominal)

Capacity: 30mAh (Milliampere-hours)

Form Factor: Coin Cell with Solder Feet

Dimensions (Approx.): 1.97 x 1.97 x 0.2 inches (50 x 50 x 5 mm)

Weight (Approx.): 0.176 ounces (5 grams)

ASIN: B07FYXWS8B

Manufacturer: Generic

9. DISPOSAL AND RECYCLING

This product contains a rechargeable battery and should not be disposed of with general household waste. NiMH batteries contain materials that can be harmful to the environment if not disposed of properly.

- **Recycle:** Always dispose of rechargeable batteries at designated recycling centers or collection points. Many electronics retailers and municipal waste facilities offer battery recycling programs.
- **Do Not Incinerate:** Never burn batteries, as they may explode and release toxic substances.
- **Do Not Puncture:** Do not puncture or damage the battery casing.

For more information on battery recycling, contact your local waste management authority or visit Call2Recycle.org (if applicable in your region).

10. WARRANTY AND SUPPORT

As this product is listed under a "Generic" brand, specific warranty information may not be provided by the manufacturer. Please refer to the terms and conditions of your purchase from the retailer or seller for any

applicable return or warranty policies.

For technical support or inquiries regarding this battery, please contact the seller or distributor from whom you purchased the product. Provide your order details and a clear description of your issue for assistance.